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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/826,583	04/06/2001	Marc Unger	20174-003010US	6679
20350	7590	05/14/2004	EXAMINER	
TOWNSEND AND TOWNSEND AND CREW, LLP TWO EMBARCADERO CENTER EIGHTH FLOOR SAN FRANCISCO, CA 94111-3834			CHAMBERS, A MICHAEL	
			ART UNIT	PAPER NUMBER
			3753	

DATE MAILED: 05/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/826,583

Applicant(s)

UNGER ET AL.

Examiner

A. Michael Chambers

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 17 February 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☐ Claim(s) 1-25 and 32-43 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 1-25 and 32-43 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

I. This action is in response to a request for reconsideration filed February 17, 2004. The claims have not been amended. This action is further in response to a preliminary amendment filed August 28, 2001. This application is a continuation-in-part(C-I-P) of serial number 09/724,784, filed November 28, 2000, pending, which is a C-I-P of serial number 09/605,520, filed June 27, 2000. These application claim benefit from provisional applications 60/141, 503, filed June 28, 1999 and 60/147,199, filed August 3, 1999 and 60/186,856, filed March 3, 2000. The specification has been amended to delete the Unger et al as a separate document and states that if it is deemed essential material, then the specification will be further amended to include the essential material. The Examiner agrees that in view of its publication date, it is not PRIOR ART. Is the Non Patent literature to Quake et al also not PRIOR ART ? The publication date is November 24, 2000. Is the patent to Quake et al prior art under 35 USC 103 ? Information disclosure documents(IDS)(5) (not yet considered) are attached. Are the listings for IDS(5) filed October 10, 2001, January 4, 2002, May 7, 2002, and August 5, 2002 and January 31, 2003 the only cited prior art by applicants ? SOME copies of the documents which are Non Patent Literature Documents(cited in the October 1, 2001 and January 4, 2002 IDS) have been received and have NOT been considered. New copies of the PTO 1449 which include the list of non-patent literature is requested in response to this Office action. Copies of the US patents are not needed to be provided. The five IDS have not yet been considered. A listing of the non-patent literature is requested in response to this Office action. Applicants are asked again to update the status of

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documents on page 86(paragraph 1) in response to this Office action. Claims 26-31 have previously been canceled and claims 1-25 and 32-43 are pending.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

***(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.***

3. Claims 1-25 and 32-43 are rejected under 35 U.S.C. 102(b) as being anticipated by O'Keefe. Note the disclosure of a plurality of microfabricated channels formed in an elastomeric block ( Figure 5, column 5, lines 20+ and column 6, lines 55+). AND-type-truth table and NOR-type-truth table is deemed to be a function of which channels are opened or closed (i.e., have fluid or do not) and are deemed to be determined by the actuation of the particular channel of the fluid logic device of Figures 1. Applicants' remarks, drawn to patent to Holster et al were considered and deemed persuasive. The newly cited patent to O'Keefe has been applied to the claims as discussed above. Applicants argue that the block in which the microfabricated channels are formed is not elastomeric. This statement is incorrect and clearly as stated in the previous Office action, O'Keefe shows in Figure 5 and discloses in column 5, lines 20+, that the "circuit layer" 56 which includes at least a channel 68 is made of "...a relatively soft resilient material, for example, rubber (elastomeric).

***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The previously applied patent to Holster et al clearly shows a truth table in Figure 3 (column 5, lines 11+).
5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to A. Michael Chambers whose telephone number is 703-308-1016. The examiner can normally be reached on Mon-Thur. 6:30am-5:00pm.
6. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Scherbel can be reached on 703-308-1272. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.
7. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after

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the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.



A. Michael Chambers  
Primary Examiner  
Art Unit 3753

amc  
05/12/04